

BIOGRAPHICAL SKETCH

NAME: Stephen H. Gavett, Ph.D. **POSITION TITLE:** Research Biologist

EDUCATION/TRAINING

Institution	Degree	Year	Field of Study
University of Virginia, Charlottesville, VA	B.A.	1980	Chemistry
University of Rochester, Rochester, NY	M.S.	1987	Toxicology
University of Rochester, Rochester, NY	Ph.D.	1989	Toxicology

PROFESSIONAL EXPERIENCE:

- 1980 - 1983 Chemist, Triangle Resource Industries (presently GSX Services), Laurel, MD
1989 - 1991 Postdoctoral Fellow, Toxicology. Haskell Laboratory for Toxicology and Industrial Medicine, E.I. du Pont de Nemours & Co., Inc., Newark, DE.
1991 - 1994 Postdoctoral Fellow, Physiology and Immunology. The Johns Hopkins University School of Hygiene and Public Health, Environ. Health Sci. Div., Baltimore, MD.
1995 - 2001 Research Biologist, GS-12. Pulmonary Tox. Branch, Experimental Tox. Div., National Health and Environmental Effects Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Research Triangle Park, NC.
2001 - 2004 Research Biologist, GS-13. PTB, ETD, NHEERL, ORD, U.S. EPA, RTP, NC.
2004 - Research Biologist, GS-14. PTB, ETD, NHEERL, ORD, U.S. EPA, RTP, NC.

PROFESSIONAL SOCIETIES:

- 1989 - Society of Toxicology (SOT), (full member 1997); Inhalation Specialty Section
1995 - American Thoracic Society (ATS), active member; Environ. and Occupational Health assembly

SELECTED AWARDS AND HONORS:

- 2002 U.S. EPA Special Commemorative Award for September 11 Activities - Lead, ORD World Trade Center Particulate Matter Toxicological Assessment Team.
2003 U.S. EPA Honor Award Gold Medal. National Health and Environmental Effects Research Laboratory PM Health Research Team.

INVITED LECTURES/SYPOSIA (selected):

4. "Metals and Asthma." SOT Continuing Educ. Course, Philadelphia, PA, March 19, 2000.
5. "Effects of Particulate Matter Air Pollution on Allergy and Asthma." Howard Hughes Internship program, North Carolina State University, Raleigh, NC, July 17, 2001.
6. "Identifying the effects of air pollution from specific sources; A toxicological perspective." Internatl. Soc. Environ. Epidemiol., Garmisch-Partenkirchen, Germany, September 5, 2001.
8. "Respiratory Effects of Particulate Matter in Allergic Mice". Pulmonary and Critical Care Research Conference, Duke University, Durham, NC, October 1, 2002.
9. "Respiratory toxicological effects of World Trade Center fine particulate matter in mice. Society of Toxicology annual meeting. Salt Lake City, UT, March 10, 2003."
10. "Evaluating the potential toxicity of World Trade Center dust." First World Congress on Risk, Society for Risk Analysis, Brussels, Belgium, June 23, 2003.
11. "When Buildings Fall Down." International Society of Aerosols in Medicine annual conference. Perth, Australia, March 17, 2005.

ASSISTANCE/LEADERSHIP PROVIDED TO THE SCIENTIFIC COMMUNITY:

- 2001-2003 ATS Environmental and Occupational Health assembly program committee
Sep. 2001 Advisor, Netherlands Aerosol Program document: health risks of PM in ambient air
2002-2003 Organize and/or co-chair symposium, poster-discussion sessions, ATS, Atlanta and Seattle
2002-2004 SOT Inhalation Specialty Section elected councillor
March 2003 Organize and co-chair World Trade Center symposium, SOT, Salt Lake City, UT

ASSISTANCE/LEADERSHIP PROVIDED TO THE AGENCY:

Oct. 2001	ATSDR-Region 1 New England State Health meeting: overview of PM toxicology
1999-2002	Major role, development of EPA ORD Asthma Research Strategy
2001-2003	Lead, ORD World Trade Center Particulate Matter Toxicological Assessment Team
April 2002	Briefed ORD Assistant Administrator on World Trade Center toxicology research.
May 2002	Organized World Trade Center research conference for ORD reps, RTP, NC
2005-2006	Co-chair, NHEERL Air Research Implementation Team

PUBLICATIONS (selected from June 1, 2002 to present):

22. Koren, H. S., B. Axelrad, L. Folinsbee, **S. Gavett**, B. Henschel, L. Kolb, S. McMaster, L. Neas, J. Nelson, W. Steen, K. Teichman, and S. Vesper. Asthma research strategy. EPA 600/R-01/061, Cincinnati, OH. 47 p., Sept. 2002. (Peer reviewed EPA Report). Available: http://oaspub.epa.gov/eims/eimscomm/getfile?p_download_id=36310
23. Savov, J. D., **S. H. Gavett**, D. M. Brass, D. L. Costa, and D. A. Schwartz. Neutrophils play a critical role in the development of LPS-induced airway disease. *Am. J. Physiol: Lung Cell Mol. Physiol.* 283: L952-L962, 2002.
24. Viana, M. E., N. H. Coates, **S. H. Gavett**, M. K. Selgrade, S. J. Vesper, and M. D. W. Ward. An extract of *Stachybotrys chartarum* causes allergic asthma-like responses in a BALB/c mouse model. *Toxicol. Sci.* 70:98-109, 2002.
25. **Gavett, S. H.**, N. Haykal-Coates, J. K. McGee, J. W. Highfill, A. D. Ledbetter, and D. L. Costa. Toxicological effects of fine particulate matter derived from the destruction of the World Trade Center. EPA/600/R-02/028, Cincinnati, OH. 53 pages, December 2002. (Peer reviewed EPA Report). Available: http://www.epa.gov/nheerl/wtc/WTC_report_7b3i.pdf
26. **Gavett, S. H.** World Trade Center fine particulate matter – chemistry and toxic respiratory effects. *Environ. Health Perspect.* 111:971, 2003. [Summary article; online 12 February 2003].
27. McGee, J. K., L. C. Chen, M. D. Cohen, G. R. Chee, C. M. Prophete, N. Haykal-Coates, S. J. Wasson, T. L. Conner, D. L. Costa, and **S. H. Gavett**. Chemical analysis of World Trade Center fine particulate matter for use in toxicologic assessment. *Environ. Health Perspect.* 111:972-980, 2003. [Online 20 November 2002].
28. **Gavett, S. H.**, N. Haykal-Coates, J. W. Highfill, A. D. Ledbetter, L. C. Chen, M. D. Cohen, J. R. Harkema, J. G. Wagner, and D. L. Costa. World Trade Center fine particulate matter causes respiratory tract hyperresponsiveness in mice. *Environ. Health Perspect.* 111:981-991, 2003. [Online 20 November 2002].
30. **Gavett, S. H.**, N. Haykal-Coates, L. B. Copeland, J. Heinrich, and M. I. Gilmour. Metal composition of ambient PM_{2.5} influences severity of allergic airways disease in mice. *Environ. Health Perspect.* 111:1471-1477, 2003. doi:10.1289/ehp.6300. [Online 27 May 2003].
31. Brass, D. M., J. D. Savov, **S. H. Gavett**, N. Haykal-Coates, and D. A. Schwartz. Subchronic endotoxin inhalation causes persistent airway disease. *Am. J. Physiol. (Lung Cell. Mol. Physiol.)* 285:L755-L761, 2003. doi:10.1152/ajplung.00001.2003. [Online 6 June 2003].
32. Vette, A.; **S. Gavett**, S. Perry, D. Heist, A. Huber, M. Lorber, P. Lioy, P. Georgopoulos, S. T. Rao, W. Petersen, B. Hicks, J. Irwin, and G. Foley. Environmental research in response to 9/11 and Homeland Security. *Environ. Man.*, February, 14-22, 2004.
33. Landrigan, P. J., P. J. Lioy, G. Thurston, G. Berkowitz, L. C. Chen, S. N. Chillrud, **S. H. Gavett**, P. G. Georgopoulos, A. S. Geyh, S. Levin, F. Perera, S. M. Rappaport, C. Small, and Working Group, NIEHS W.T.C. Health and environmental consequences of the World Trade Center disaster. *Environ. Health Perspect.* 112:731-739, 2004. doi:10.1289/ehp.6702. [Online 18 February 2004].
34. **Gavett, S. H.** M. Kollarik, and B. Undem. Irritant agonists and air pollutants: Neurologically mediated respiratory and cardiovascular responses. In: Air Pollutants and the Respiratory Tract, 2nd edition. Lung Biology in Health and Disease, vol. 204. W. M. Foster and D. L. Costa, eds. Marcel Dekker, New York, 195-232, 2005.
35. Que, L. G., L. Liu, Y. Yan, G. S. Whitehead, **S. H. Gavett**, D. A. Schwartz, and J. S. Stamler. Protection from experimental asthma by an endogenous bronchodilator. *Science* 308:156-1561, 2005. [Online 26 May 2005].
36. **Gavett, S. H.** Physical characteristics and health effects of aerosols from collapsed buildings. *J. Aer. Med.* 19:84-91, 2006.
37. Farraj, A. K., N. Haykal-Coates, A. D. Ledbetter, P. A. Evansky, and **S. H. Gavett**. Inhibition of pan neurotrophin receptor p75 attenuates diesel particulate-induced enhancement of allergic airway responses in C57/B16J mice. *Inhal. Toxicol.* 18:483-491, 2006.